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Remarks

Claims 1-34 are pending in the application.

Claims 1-5, 7-14, 16-17, 20-22, 24-25, and 28-30 are rejected under 35 U.S.C. 103(a) as being anticipated by United States Patent No. 6,590,996 issued to Reed et al. on July 8, 2003 in view of United States Patent No. 7,072,487 issued to Reed et al. on July 4, 2006.

Claims 6, 15, 19, and 23 are indicated to contain allowable subject matter.

Each of the various rejections and objections are overcome by amendments that are made to the specification, drawing, and/or claims, as well as, or in the alternative, by various arguments that are presented.

Any amendments to any claim for reasons other than as expressly recited herein as being for the purpose of distinguishing such claim from known prior art are not being made with an intent to change in any way the literal scope of such claims or the range of equivalents for such claims. They are being made simply to present language that is better in conformance with the form requirements of Title 35 of the United States Code or is simply clearer and easier to understand than the originally presented language. Any amendments to any claim expressly made in order to distinguish such claim from known prior art are being made only with an intent to change the literal scope of such claim in the most minimal way, i.e., to just avoid the prior art in a way that leaves the claim novel and not obvious in view of the cited prior art, and no equivalent of any subject matter remaining in the claim is intended to be surrendered.

Also, since a dependent claim inherently includes the recitations of the claim or chain of claims from which it depends, it is submitted that the scope and content of any dependent claims that have been herein rewritten in independent form is exactly the same as the scope and content of those claims prior to having been rewritten in independent form. That is, although by convention such rewritten claims are labeled herein as having been "amended," it is submitted that only the format, and not the content, of these claims has been changed. This is true whether a dependent claim has been rewritten to expressly include the limitations of those claims on which it formerly depended or whether an independent claim has been rewritten to include the limitations of claims that previously

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depended from it. Thus, by such rewriting no equivalent of any subject matter of the original dependent claim is intended to be surrendered. If the Examiner is of a different view, he is respectfully requested to so indicate.

Entry of this Amendment is proper under 37 CFR § 1.116 since the amendment: (a) places the application in condition for allowance for the reasons discussed herein; (b) does not raise any new issue requiring further search and/or consideration since the amendments amplify issues previously discussed throughout prosecution; (c) satisfies a requirement of form asserted in the previous Office Action; (d) does not present any additional claims without canceling a corresponding number of finally rejected claims; or (e) places the application in better form for appeal, should an appeal be necessary. The amendment is necessary and was not earlier presented because it is made in response to arguments raised in the final rejection. Entry of the amendment is thus respectfully requested.

#### Response to Comments

The Office Action seems to imply that one of the limitations of applicant's amended independent claims, namely, "without changing its luminance", is not expressly stated in the specification as filed. Applicant respectfully disputes the Office Action's implication, and notes the following.

By definition, when one changes only the U or the V in a YUV system, the luminance is not changed, because the Y is the luminance and it remains unchanged. The teaching of applicant's specification is to only change the value of U or the value of V, and not the value of Y. Since nowhere in his teaching of the instant invention does applicant teach to change the Y value, the teaching of the specification supports the claim language that the luminance is not changed.

Furthermore, the section of the specification referred to by the Office Action to imply that the specification teaches modifying the luminance, i.e., the section regarding step 305 which is cited by the Office Action, does not teach to modify the Y value of any pixel. Indeed, computing the variance of the luminance is not the same as changing the value of the luminance for any pixel. Rather, the value of the luminance variance computed for the pixel,  $\text{var}(p,q)$ , is used later on in the calculations used in modifying the

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values of one of the U or the V, given the prescribed thresholds. (See for example, page 16, line 18 through page 18, line 31 of applicant's specification as filed.) However, the value of Y of any pixel, i.e., the value of the pixel's luminance, is not modified. Only the values of U and V are modified, which are not luminance values.

Thus, applicant's claim language is support by the specification as originally filed.

**Rejection Under 35 U.S.C. 103**

Claims 1-5, 7-14, 16-17, 20-22, 24-25, and 28-30 are rejected under 35 U.S.C. 103(a) as being anticipated by United States Patent No. 6,590,996 issued to Reed et al. on July 8, 2003 in view of United States Patent No. 7,072,487 issued to Reed et al. on July 4, 2006.

This ground of rejection is respectfully traversed for the following reasons.

First, neither Reed '996 nor Reed '487 teaches not to modify the luminance, as required by applicant's claims. Rather, they each teach to modify the luminance.

For the reasons set forth at length in the applicant's previous response, Reed '996 teaches to modify the luminance, and so it does not teach to not modify the luminance. This was not disputed by the current Office Action.

Reed '487 is a watermark detecting technique which relies on the watermarking having modified the luminance. See, for example, Reed '487, figures 2 and 4 as well as column 1, lines 22-28, column 2, lines 30-43 and 54-58, which explains that the "scale to black" watermarking technique modifies the luminance, and that the Reed '487 is directed to better extracting the watermark signal from images that were watermarked by modifying their luminance using scale to black watermarking. The projection and luminance axis mentioned by the Office Action has nothing to do with the application of the watermark and the modifying of the luminance during the watermark process, but rather is employed as part of the detecting. Furthermore, by that point the image was already watermarked using the scale to black technique, and thus has had its luminance modified. Therefore, Reed '487 teaches to modify the luminance rather than to not modify the luminance.

Thus, a combination of Reed '996 and Reed '487 would not teach applicant's claim limitation to not to modify the luminance.

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Second, the table of Reed '996 does not indicate which, if any, of the chrominance portions of a plurality of pixels in a colorspace should be selected for watermarking, as required by applicant's claims.

Instead, in Reed '996 the table is for performing mapping or scaling. See Reed '996, column 1, lines 46-65. The table is not used for the purpose of determining, i.e., indicating which, if any, of the chrominance portions of a plurality of pixels in a colorspace should be selected for watermarking, as required by applicant's claims.

Reed '487 does not teach a table at all. Therefore, Reed '487 cannot teach a table that is used for the purpose of indicating which, if any, of the chrominance portions of a plurality of pixels in a colorspace should be selected for watermarking, as required by applicant's claims.

Since neither Reed '996 nor Reed '487 teaches a table that is used for the purpose of indicating which, if any, of the chrominance portions of a plurality of pixels in a colorspace should be selected for watermarking, as required by applicant's claims, a combination of these references cannot teach such a table either.

#### Amendments to Claims

Each of the independent method claims have been amended so that the language more clearly represents the intention that the step recited therein is performed automatically, i.e., it is not a human mental step, and that the table employed is in a computer readable medium. There is no intention to change the scope of the invention. Note that for a video signal it would be impossible for a human to perform the recited step of the independent method claims in a timely manner to actually implement the invention.

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**Conclusion**

It is respectfully submitted that the Office Action's rejections have been overcome and that this application is now in condition for allowance. Reconsideration and allowance are, therefore, respectfully solicited.

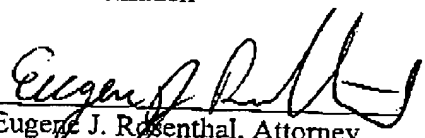
If, however, the Examiner still believes that there are unresolved issues, he is invited to call applicant's attorney so that arrangements may be made to discuss and resolve any such issues.

In the event that an extension of time is required for this amendment to be considered timely, and a petition therefor does not otherwise accompany this amendment, any necessary extension of time is hereby petitioned for, and the Commissioner is authorized to charge the appropriate cost of such petition to the **Lucent Technologies Deposit Account No. 12-2325**.

Respectfully,

M. H. Zarrabizadeh

By

  
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Lucent Technologies Inc.

Date: 5/9/08